

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of October 5, 2009 is respectfully requested.

By this Amendment, claim 1 has been amended and claim 36 has been cancelled. Thus, claims 1-35 and 37-55 are currently pending in the application. No new matter has been added by these amendments.

On pages 2-3 of the Office Action, the Examiner objected to the drawings as failing to show every feature of the invention specified in the claims. In particular, the Examiner asserted that Figs. 32 and 33 do not show the "junction body" recited in claim 1. In this regard, it is noted that the phrase "junction body" has been deleted from claim 1, and that all of the limitations of amended claim 1 are shown in Figs. 32 and 33. Accordingly, it is respectfully submitted that the Examiner's objection is not applicable to the drawings in view of the amendments to claim 1.

On pages 4-5 of the Office Action, the Examiner rejected claims 1 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Suenaga (US 2002/0066272) in view of Dean, III et al. (US 4,135,603). For the reasons discussed below, it is respectfully submitted that the amended claims are clearly patentable over the prior art of record.

Amended independent claim 1 recites a gas turbine combustor having a cylinder body, which includes an air-container body which accommodates air for resonance for fluid particles serving as vibration elements of combustion vibration, a resonator having an internal cavity which is installed around a periphery of the cylinder body and which is arranged so as to communicate with the cylinder body through sound-absorption holes, and a first throat having a predetermined length which has one end opening to the cylinder body and which has another end opening to the air-container body. Further, independent claim 1 recites that *the air-container body forms a closed space excluding an opening only through the first throat, that the air-container body is disposed on the periphery of the cylinder body so as to be adjacent to the resonator, and that a longitudinal direction of the first throat is transverse with respect to a longitudinal direction of each of the sound-absorption holes.*

Suenaga discloses a gas turbine combustor which, as shown in Fig. 1, includes an inner cylinder 2 and a cylinder tail 9. Suenaga also discloses an acoustic liner 16 formed around the cylinder tail 9, and that cooling grooves 13 and sound absorption holes 14 are formed in the wall of the cylinder tail 9. However, as noted by the Examiner on page 4 of the Office Action,

Suenaga does not disclose *an air-container body or a first throat having an end which opens to the air-container body*, as required by independent claim 1. Accordingly, as Suenaga does not disclose an air-container body or a first throat having an end which opens to the air-container body, Suenaga also does not disclose *an air-container body which forms a closed space excluding an opening only through the first throat, that the air-container body is disposed on the periphery of the cylinder body so as to be adjacent to the resonator, and that a longitudinal direction of the first throat is transverse with respect to a longitudinal direction of each of the sound-absorption holes*, as required by independent claim 1.

In this regard, the Examiner cites Fig. 4 of Dean as disclosing an air-container body 64, and a junction body 60 being open to the air-container body 64 via an opening 68. Further, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify the resonator 16 of Suenaga such that the air-container body 64 of Dean is coupled to the resonator 16 of Suenaga.

However, it is noted that modifying the resonator 16 of Suenaga to include the cavity 64 as shown in Fig. 4 of Dean would not result in the invention of independent claim 1. In particular, it is first noted that adding a cavity 64 (*i.e.*, the air-container body, as indicated by the Examiner) to the resonator 16 of Suenaga in the manner shown in Fig. 4 of Dean would result in an air-container body disposed on the periphery of the resonator 16, and would not result in air-container body disposed on the periphery of the cylinder body so as to be adjacent to the resonator, as required by independent claim 1. Further, adding an “air-container body” 64 to the resonator 16 of Suenaga in the manner shown in Fig. 4 of Dean would result in the tubes 68 and 70 of Dean being parallel to the longitudinal direction of the sound-absorption holes 14 of Suenaga, and therefore the combination of Suenaga and Dean does not disclose or suggest that a longitudinal direction of the first throat is transverse with respect to a longitudinal direction of each of the sound-absorption holes, as required by independent claim 1.

Further, it is noted that the cavities disclosed in Figs. 2 and 3 of Dean each have two openings, and therefore modifying the resonator 16 of Suenaga to include any of the cavities of Figs. 2 and 3 of Dean would not result in an air-container body which forms a closed space excluding an opening only through the first throat, as required by independent claim 1.

Accordingly, as none of the Suenaga and Dean references discloses or suggests an air-container body which forms a closed space excluding an opening only through the first throat,

that the air-container body is disposed on the periphery of the cylinder body so as to be adjacent to the resonator, and that a longitudinal direction of the first throat is transverse with respect to a longitudinal direction of each of the sound-absorption holes, as required by independent claim 1, it is respectfully submitted that the combination of the Suenaga and Dean references does not disclose or suggest an air-container body which forms a closed space excluding an opening only through the first throat, that the air-container body is disposed on the periphery of the cylinder body so as to be adjacent to the resonator, and that a longitudinal direction of the first throat is transverse with respect to a longitudinal direction of each of the sound-absorption holes, as required by independent claim 1.

Therefore, for the reasons presented above, it is believed apparent that the present invention as recited in independent claim 1 is not disclosed or suggested by the Suenaga reference and the Dean reference taken either individually or in combination. Accordingly, a person having ordinary skill in the art would clearly not have modified the Suenaga reference in view of the Dean reference in such a manner as to result in or otherwise render obvious the present invention of independent claim 1.

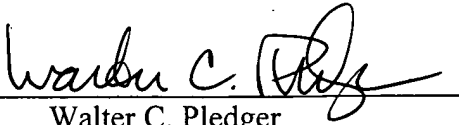
Therefore, it is respectfully submitted that independent claim 1 is clearly allowable over the prior art of record. Additionally, as claims 2-35 and 37-55 depend directly or indirectly from claim 1, it is respectfully submitted that claims 2-35 and 37-55 are also allowable over the prior art of record.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice to that effect is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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